

SEQUENCE LISTING

RECEIVED
TECH CENTER 1600/2900
02 SEP 20 PM 2:33

<110> Pedersen, A.H., et al.
Maxygen ApS

<120> Interferon-Beta Variants and Conjugates

<130> 0202us810

<140> US 09/648,569

<141> 2000-08-25

<160> 45

<170> PatentIn Ver. 2.1

<210> 1

<211> 840

<212> DNA

<213> Homo sapiens

<400> 1

```
acattctaac tgcaaccttt cgaagccttt gctctggcac aacaggtagt aggcgacact 60
gttcgtgttg tcaacatgac caacaagtgt ctctccaaa ttgctctcct gttgtgcttc 120
tccactacag ctctttccat gagctacaac ttgcttggat tcctacaaag aagcagcaat 180
tttcagtgtc agaagctcct gtggcaattg aatgggaggc ttgaatactg cctcaaggac 240
aggatgaact ttgacatccc tgaggagatt aagcagctgc agcagttcca gaaggaggac 300
gccgcattga ccatctatga gatgctccag aacatctttg ctattttcag acaagattca 360
tctagcactg gctggaatga gactattgtt gagaacctcc tggctaattg ctatcatcag 420
ataaaccatc tgaagacagt cctggaagaa aaactggaga aagaagattt caccagggga 480
aaactcatga gcagtctgca cctgaaaaga tattatggga ggattctgca ttacctgaag 540
gccaaggagt acagtcaact tgacctggacc atagtcagag tggaaatcct aaggaacttt 600
tacttcatta acagacttac aggttacctc cgaaactgaa gatctcctag cctgtgcctc 660
tgggactgga caattgcttc aagcattctt caaccagcag atgctgttta agtgactgat 720
ggctaattga ctgcatatga aaggacacta gaagattttg aaatttttat taaattatga 780
gtatttttta tttatttaaa ttttattttg gaaaataaat tatttttggt gcaaaagtca 840
```

<210> 2

<211> 166

<212> PRT

<213> Homo sapiens

<400> 2

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
  1              5              10              15

Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
      20              25              30

Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
      35              40              45

Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
      50              55              60

Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
```

65		70		75		80
Glu Thr Ile Val	Glu Asn Leu Leu	Ala Asn Val Tyr	His Gln Ile Asn			
	85	90	95			
His Leu Lys Thr	Val Leu Glu Glu	Lys Leu Glu Lys	Glu Asp Phe Thr			
	100	105	110			
Arg Gly Lys Leu	Met Ser Ser Leu	His Leu Lys Arg	Tyr Tyr Gly Arg			
	115	120	125			
Ile Leu His Tyr	Leu Lys Ala Lys	Glu Tyr Ser His	Cys Ala Trp Thr			
	130	135	140			
Ile Val Arg Val	Glu Ile Leu Arg	Asn Phe Tyr Phe	Ile Asn Arg Leu			
	145	150	155	160		
Thr Gly Tyr Leu	Arg Asn					
	165					

<210> 3
 <211> 70
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 3
 ggctagcggtt taaacttaag cttcgccacc atgaccaaca agtgccctgct ccagatcgcc 60
 ctgctcctgt 70

<210> 4
 <211> 70
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 4
 acaacctgct cggcttcctg cagaggagtt cgaacttcca gtgccagaag ctctgtggc 60
 agctgaacgg 70

<210> 5
 <211> 70
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 5

gaacttcgac atccccgagg aaatcaagca gctgcagcag ttccagaagg aggacgccgc 60
tctgaccatc 70

<210> 6
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 6
ttccgccagg actccagctc caccggttgg aacgagacca tcgtggagaa cctgctggcc 60
aacgtgtacc 70

<210> 7
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 7
aggagaagct ggagaaggag gacttcaccc gcggcaagct gatgagctcc ctgcaccta 60
agcgctacta 70

<210> 8
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 8
ggagtacagc cactgcgcct ggaccatcgt acgcgtggag atcctgcgca acttctactt 60
catcaaccgc 70

<210> 9
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 9
caccacactg gactagtgga tccttatcag ttgcgcaggt agccggtcag gcggttgatg 60
aagtagaagt 70

<210> 10

<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 10
aggcgcagtg gctgtactcc ttggccttca ggtagtgcag gatgcggcca tagtagcgct 60
tcaggtgcag 70

<210> 11
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 11
ctccttctcc agcttctcct ccagcacggt cttcaggtgg ttgatctggt ggtacacgtt 60
ggccagcagg 70

<210> 12
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 12
gagctggagt cctggcggaa gatggcgaag atgttctgca gcatctcgta gatggtcaga 60
gcggcgctcct 70

<210> 13
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<400> 13
cctcggggat gtcgaagttc atcctgtcct tcaggcagta ctccaggcgc ccgttcagct 60
gccacaggag 70

<210> 14
<211> 70
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 14

caggaagccg agcaggttgt agctcatcga tagggccgtg gtgctgaagc acaggagcag 60
ggcgatctgg 70

<210> 15

<211> 70

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 15

ctgctcca ga tcgccctgct cctgtgcttc agcaccacgg ccctatcgat gaagcaccag 60
caccagcatc 70

<210> 16

<211> 70

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 16

cactgcttac tggcttatcg aaattaatac gactcactat agggagaccc aagctggcta 60
gcgtttaaac 70

<210> 17

<211> 70

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 17

caggaagccg agcaggttgt agctcatctg ttggtgttga tggttggtgct gatgctgggtg 60
ctggtgcttc 70

<210> 18

<211> 70

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 18

agcagggcga tctggagcag gcacttggtg gtcatggtgg cgaagcttaa gtttaaaccg 60
tagccagctt 70

<210> 19
 <211> 40
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer

 <400> 19
 ccgtcagatc ctaggctagc ttattgcbgt agtttatcac 40

 <210> 20
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer

 <400> 20
 gagctcggta ccaagctttt aagagctgta at 32

 <210> 21
 <211> 77
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer

 <400> 21
 gctgaacggg cgcctggagt actgcctgaa ggacaggatg aacttcgaca tccccgagga 60
 aatccgccag ctgcagc 77

 <210> 22
 <211> 35
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer

 <400> 22
 tctccacgag tacgatgggc caggcgcagt ggctg 35

 <210> 23
 <211> 70
 <212> DNA
 <213> Artificial Sequence

 <220>

<223> Description of Artificial Sequence: primer

<400> 23

caccacactg gactagtgga tccttatcag ttgcgcaggt agccggtcag gcggttgatg 60
aagtagaagt 70

<210> 24

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 24

catcagcttg ccggtggtgt tgcctcctt c 31

<210> 25

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 25

gaaggaggac aacaccaccg gcaagctgat g 31

<210> 26

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 26

cacactggac tagtaagctt ttatcagttg cgcaggtagc 40

<210> 27

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 27

gaggagttcg aacttccagt gccagcgcct cctgtggcag ctgaacg 47

<210> 28

<211> 29

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer

 <400> 28
 cgcggatcca tatgaccaac aagtgcctg 29

 <210> 29
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer

 <400> 29
 cgcggatcct tatcagttgc gcag 24

 <210> 30
 <211> 33
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer

 <400> 30
 tttaaactgg atccagccac catgaccaac aag 33

 <210> 31
 <211> 63
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer

 <400> 31
 cggccatagt agcgcttcag gtgcagggag ctcatcagct tgccggtggt gttgtcctcc 60
 ttc 63

 <210> 32
 <211> 63
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: primer

 <400> 32
 gaaggaggac aacaccaccg gcaagctgat gagctccctg cacctgaagc gctactatgg 60

ccg

63

<210> 33

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 33

ggcgtcctcc ttggtgaagt tctgcagctg

30

<210> 34

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 34

atatatccca agcttttatac agttgcgcag gtagccggt

39

<210> 35

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 35

cagctgcaga acttcaccaa ggaggacgcc

30

<210> 36

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 36

cgcgatcca gccaccatga ccaacaagtg cctg

34

<210> 37

<211> 89

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 37

aactggatcc agccaccatg accaacaagt gcctgctcca gatcgccctg ctctgtgct 60
tcagcaccac ggccctagcc cagagctac 89

<210> 38

<211> 92

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

<400> 38

aactggatcc agccaccatg accaacaagt gcctgctcca gatcgccctg ctctgtgct 60
tcagcaccac ggccctagcc cagatgagct ac 92

<210> 39

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: peptide tag

<400> 39

His His His His His
1 5

<210> 40

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: peptide tag

<400> 40

Met Lys His His His His His His
1 5

<210> 41

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: peptide tag

<400> 41

Met Lys His His Ala His His Gln His His
1 5 10

<210> 42
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide tag

<400> 42
Met Lys His Gln His Gln His Gln His Gln His Gln His Gln
1 5 10

<210> 43
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide tag

<400> 43
Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
1 5 10

<210> 44
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide tag

<400> 44
Asp Tyr Lys Asp Asp Asp Asp Lys
1 5

<210> 45
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide tag

<400> 45
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
1 5